

ABSTRACT

A demodulating circuit includes a differentiating circuit that outputs a differentiated signal indicating voltage changes at rising and falling edges of a received pulse signal, and a hysteresis comparator that compares the differentiated signal with upper and lower threshold voltages, thereby generating a demodulated logic-level signal. The differentiating circuit can rapidly track variations in the direct-current offset of the received pulse signal. Positive feedback can enable the hysteresis comparator to maintain the correct output logic level during runs of 0's or 1's of arbitrary length in the received pulse signal. The demodulating circuit consumes comparatively little power, and is particularly useful for receiving signals transmitted in bursts.